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## **Mental Health Literacy, Attitudes to Help Seeking, and Perceived Need as Predictors of Mental Health Service Use: A Longitudinal Study**

Bonabi, Herdis ; Müller, Mario ; Ajdacic-Gross, Vladeta ; Eisele, Jochen ; Rodgers, Stephanie ; Seifritz, Erich ; Rössler, Wulf ; Rüsch, Nicolas

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# Mental Health Literacy, Attitudes to Help Seeking, and Perceived Need as Predictors of Mental Health Service Use

## A Longitudinal Study

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**Abstract:** Many people with mental health problems do not use mental health care, resulting in poorer clinical and social outcomes. Reasons for low service use rates are still incompletely understood. In this longitudinal, population-based study, we investigated the influence of mental health literacy, attitudes toward mental health services, and perceived need for treatment at baseline on actual service use during a 6-month follow-up period, controlling for sociodemographic variables, symptom level, and a history of lifetime mental health service use. Positive attitudes to mental health care, higher mental health literacy, and more perceived need at baseline significantly predicted use of psychotherapy during the follow-up period. Greater perceived need for treatment and better literacy at baseline were predictive of taking psychiatric medication during the following 6 months. Our findings suggest that mental health literacy, attitudes to treatment, and perceived need may be targets for interventions to increase mental health service use.

**Key Words:** Attitudes toward help-seeking, mental health literacy, mental health service use, perceived need for treatment

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The majority of people with mental illness do not receive mental health care (Thornicroft, 2007). In Europe, approximately 1 in 4 individuals with mental disorders receives appropriate treatment (Wittchen and Jacobi, 2005); in low- and middle-income countries, the number is even smaller (Wang et al., 2007). Lack of treatment typically results in poorer clinical, social, and socioeconomic outcomes.

Previous research has identified a number of factors that contribute to this treatment gap. In this study, we focus on 3 variables that are underinvestigated predictors of service use in longitudinal studies: mental health literacy, perceived need for treatment, and attitudes to service use. Poor knowledge about mental health, referred to as low mental health literacy, is one of these barriers. Jorm (2012) defined mental health literacy as knowledge and beliefs about mental disorders with respect to recognition, management, and prevention. Positive beliefs about antidepressant medication, for example, predicted use of antidepressants (Jorm et al., 2000). Perceived need for mental health care is a second factor that affects service use decisions. If people with mental health problems do not think they need help, they are unlikely to enter treatment (Blumenthal and Endicott 1996/1997). Finally, attitudes toward mental health services, or views on whether mental health service use is appropriate and likely beneficial, will determine help-seeking behaviors (Fischer and Farina 1995). In a cross-sectional European survey, negative attitudes toward mental health care were associated with reduced service use (Ten Have et al., 2000).

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Despite substantial previous research, predictors of mental health service use are still incompletely understood. A better understanding of knowledge- and attitude-related barriers and facilitators of care seeking can help identify modifiable targets for interventions to increase help-seeking rates. Much previous work on this issue relied either on samples recruited in clinical settings who were already in treatment or on members of the general public without a mental illness who reported their intentions how to react to a potential mental illness. Furthermore, most research was cross-sectional, limiting conclusions on causality.

We therefore conducted a longitudinal study based on a population-based sample of participants with high levels of psychological symptoms. We expected that more positive attitudes toward mental health care, better mental health literacy, and more perceived need for treatment at baseline would predict mental health service during the 6-month follow-up period in terms both of outpatient psychotherapy and of psychiatric medication.

## METHODS

### Participants

All data were collected in the epidemiological survey of the ZInEP-study (Zurich Program for Sustainable Development of Mental Health Services; [www.zinep.ch](http://www.zinep.ch)) on prevalence of common mental disorders and help seeking in the Canton of Zurich, Switzerland (Ajdacic-Gross et al., 2014). The study was approved by the regional ethics committee of the Canton of Zurich. By telephone interviews, a sample of 9829 young to middle-aged Swiss participants was examined with a screening interview. General psychopathology was assessed with the Symptom Checklist 27 (SCL-27; Hardt et al., 2004), yielding a mean global severity index score between 0 and 4, with higher scores reflecting more symptoms. A 75th percentile cutoff of SCL-27 scores was used to divide the total sample into low and high scorers; from low and from high scorers, random subsamples were drawn, resulting in 600 low scorers and 900 high scorers. From the 900 high scorers, a subsample of 239 was selected based on paranoia and/or psychoticism scores assessed during the telephone screening interviews (for details, see Ajdacic-Gross et al., 2014; Oexle et al., 2015). These 239 individuals participated in a longitudinal study, including the assessment of mental health service use during 6 months after baseline. The follow-up assessment after 6 months was completed by 172. Participants were on average 32 years old, and the majority was female (see Table 1 for details). More than half had a high education level (defined as college or university degree vs any lower qualification).

### Measures

At baseline, attitudes toward seeking professional psychological help, depression literacy, and perceived need for treatment were assessed by self-report. Using the 10-item Attitudes Toward Seeking Professional Psychological Help Scale–Short Form (Fischer and Farina, 1995), we measured attitudes toward help seeking, with higher sum scores between 0 and 30 indicating more positive attitudes (in our study, Cronbach

**TABLE 1.** Descriptive Statistics for the Total Sample (n = 172); Subgroup Comparison (t Tests, With vs Without Service Use) and Multivariate Logistic Regressions on Service Use (Psychiatric Medication or Psychotherapy; Reference = Not Using This Service) During 6 Months After Baseline

Dependent Variable	Independent Variables (Baseline)	Total (n = 172), Mean (SD), n (%)	Not Using This Service (Psychotherapy: n = 131), Mean (SD), n (%)	Using This Service (Psychotherapy: n = 41), Mean (SD), n (%)	t Test for Group Comparisons p	Adjusted OR (95% CI)
Use of psychiatric medication during 6 mo	Attitude toward seeking professional psychological help	20.9 (5.3)	19.9 (5.2)	24.1 (4.3)	<.001	<b>2.67 (1.19–5.10)*</b>
	Depression literacy	9.2 (4.7)	8.4 (4.1)	11.6 (5.5)	<.001	<b>2.05 (1.08–3.89)*</b>
	Perceived need for treatment	13.0 (4.4)	11.5 (3.2)	17.7 (4.4)	<.001	<b>6.23 (2.73–14.18)***</b>
	Female sex	103 (60%)	79 (60%)	24 (59%)	.84	0.33 (0.09–1.15)
	Age	31.7 (6.8)	30.6 (6.7)	35.0 (6.2)	<.001	1.35 (0.72–2.54)
	Higher education	100 (58%)	76 (58%)	24 (59%)	.95	2.35 (0.69–8.01)
	Symptoms (SCL-27)	2.1 (0.5)	2.0 (0.4)	2.4 (0.6)	<.001	1.76 (0.95–3.26)
	History of lifetime mental health service use (yes = 1; no = 0)	98 (57%)	65 (50%)	33 (80%)	<.001	1.92 (0.59–6.26)
Dependent Variable	Independent Variables (Baseline)	Total (n = 172), Mean (SD), n (%) <sup>a</sup>	Not Using This Service (Psychiatric Medication: n = 144), Mean (SD), n (%)	Using This Service (Psychiatric Medication: n = 28), Mean (SD), n (%)	t Test for Group Comparisons p	Adjusted OR (95% CI)
Use of psychiatric medication during 6 mo	Attitude toward seeking professional psychological help	20.3 (5.2)	20.3 (5.2)	23.9 (4.7)	.002	1.41 (0.68–2.94)
	Depression literacy	8.7 (4.4)	8.7 (4.4)	11.5 (5.4)	.003	<b>2.12 (1.11–4.06)*</b>
	Perceived need for treatment	12.1 (3.7)	12.1 (3.7)	17.6 (4.9)	<.001	<b>3.59 (1.76–7.34)***</b>
	Female sex	86 (60%)	86 (60%)	17 (61%)	.92	0.66 (0.19–2.23)
	Age	31.2 (6.9)	31.2 (6.9)	34.1 (6.1)	.04	0.92 (0.48–1.76)
	Higher education	85 (59%)	85 (59%)	15 (54%)	.59	1.05 (0.32–3.42)
	Symptoms (SCL-27)	2.0 (0.5)	2.0 (0.5)	2.4 (0.5)	<.001	1.26 (0.68–2.35)
	History of lifetime mental health service use (yes = 1; no = 0)	73 (51%)	73 (51%)	25 (89%)	<.001	<b>4.19 (1.01–17.44)*</b>

\*p < 0.05, significant ORs in bold.

\*\*p < 0.01.

\*\*\*p < 0.001.

<sup>a</sup>For both types of service use (psychotherapy and medication), mean (SD) and n (%) for the total sample of 172 are identical and are therefore not repeated in the lower half of the table.

$\alpha = 0.81$ ). In the absence of a criterion-standard measure of mental health literacy (O'Connor et al., 2014), we chose the well-established 22-item Depression Literacy Questionnaire to assess depression-related literacy (Griffiths et al., 2004) because depression is one of the most common mental disorders. Higher sum scores from 0 to 22 represent better knowledge about depression, including its symptoms and effective treatments. Perceived need for treatment was measured with the 6-item Perceived Need for Treatment subscale of the Self-appraisal of Illness Questionnaire (Marks et al., 2000), with higher sum scores between 6 and 24 indicating more perceived need (in our study, Cronbach  $\alpha = 0.89$ ). At baseline, participants indicated whether they had ever received treatment for a mental health problem, and self-reported lifetime mental health service use was coded as binary variable (yes = 1; no = 0). At 6-month follow-up and using a previously validated self-report measure of mental health service use (Rüsch et al., 2009), participants reported whether and for how long they had used outpatient psychotherapy or psychiatric medication during the past 6 months.

## Statistical Analyses

Descriptive statistics of attitudes toward help seeking, mental health literacy, perceived need for treatment, and sociodemographic and clinical variables are provided for the total sample as well as stratified by status of service use after baseline (psychotherapy and psychiatric medication). Mean differences were examined using *t* tests for independent samples. To examine whether predictor variables at baseline account for independent variance of service use over time, 2 multivariate logistic regression models were calculated with all predictors adjusting for sociodemographic variables, symptom, and lifetime service use and with 1 model for each outcome (use of psychotherapy, use of medication), with no use of the respective service as reference category. Odds ratios (ORs) and 95% confidence intervals (95% CI) were calculated to estimate the impact of a given predictor. Analyses were conducted using Stata/SE version 12.1 (StataCorp, 2011).

## RESULTS

For the use of both psychotherapy and psychiatric medication, we found a bimodal distribution similar to previous studies (Rüsch et al., 2009). Most participants either used the respective service throughout the 6-month follow-up period or did not use it at all. For the regression analyses, we therefore categorized the use of each service as a dichotomous dependent variable (using the service not at all/once vs continuously during a period from 1 to 6 months). Among the 172 participants, 41 (24%) had used psychotherapy, and 28 (16%) had used psychiatric medication during follow-up. Lifetime mental health service use was reported by 98 (57%).

In *t* tests for independent samples, service use during the past 6 months (either psychotherapy or medication) was associated with higher age; more psychopathology, lifetime service use, and with more positive attitudes toward help seeking; better mental health literacy; and greater perceived need for treatment at baseline (Table 1). Attitudes toward help seeking, literacy, and perceived need remained significant predictors of psychotherapy use in a multivariate logistic regression (pseudo  $R^2 = 0.49$ ; Table 1, upper half). In the multivariate regression on medication, literacy, perceived need, and lifetime service use significantly predicted taking psychiatric medication during follow-up (pseudo  $R^2 = 0.36$ ; Table 1, lower half).

## DISCUSSION

Our findings support the hypothesis that mental health literacy, positive attitudes to help seeking, and perceived need for treatment significantly and independently predict use of psychotherapy over time. The pattern for psychiatric medication was similar, except that attitudes to help seeking did not predict service use; this is probably because the attitude scale measured views on psychological therapy rather than on

medication. Our results are consistent with previous work on the role of mental health literacy (Gulliver et al., 2010; Jorm 2012), perceived need for treatment (Codony et al., 2009), and attitudes (Ten Have et al., 2000) for mental health service use.

These results have implications for interventions to increase service use rates. In terms of mental health literacy, there is evidence that Mental Health First Aid (Jorm et al., 2004; Kitchener and Jorm 2002) improves knowledge about mental health and effective treatments in the general population (Hadlaczky et al., 2014; Svensson and Hansson 2014). With a majority of people with mental disorders not perceiving need for mental health care (Codony et al., 2009), interventions to increase perceived need may improve help seeking. Because attitudes toward mental health services in 2 population-based samples in Canada and the United States were particularly negative among young people with lower education and low socioeconomic status (Jagdeo et al., 2009), interventions could target these groups.

Limitations of our study need to be considered. The number of participants was small. The duration of symptoms and details of previous service use were unknown. Finally, our measures had limitations: the literacy scale focused on depression, although the study sample had relatively high levels of psychotic symptoms; the help-seeking attitudes scale referred to psychological therapies and not to psychiatric medication.

Despite these limitations, this study provides additional evidence that mental health literacy, attitudes toward services, and perceived need for treatment shape actual service use behaviors over time. Different levels of interventions aim to improve mental health literacy and service use attitudes (Kelly et al., 2007). Future research could investigate the effects of such interventions on help-seeking rates in the general population.

## DISCLOSURE

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*The authors declare no conflict of interest.*

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